

Amendments to the Claims

Please cancel claims 43-48, 50-51, 57-58, 60-61, and 63-64 without prejudice or disclaimer.

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-45. (Cancelled)

46. (currently amended) A method of causing tumor cell death by targeting tumor vasculature, comprising administering to a mammal a composition which comprises a molecule that detects ephrin-B2 coupled to an agent that causes tumor cell death, wherein the agent that causes tumor cell death is carboplatin, cisplatin, vincristine, methotrexate, paclitaxel, docetaxel, 5-fluorouracil, UFT, hydroxyurea, gemcitabine, vinorelbine, irinotecan, tirapazamine, or matrilysin, and the molecule that detects ephrin-B2 is a nucleic acid or a polypeptide.

47-48. (Canceled)

49. (currently amended) A method of causing vascular endothelial cell death by targeting tumor vasculature, comprising administering to a mammal a composition which comprises a molecule that detects ephrin-B2 coupled to an agent that causes vascular endothelial cell death, wherein the agent that causes vascular endothelial cell death is gelonin, ricin A, ricin B, saporin, bryodin 1, bryodin 2, momordin, pokeweed antiviral protein from seeds (PAP-S), trichokirin, or abrin, and the molecule that detects ephrin-B2 is a nucleic acid or a polypeptide.

50-51. (canceled)

52. (currently amended) The method of claim 43, 46, or 49, wherein the mammal is a human.

53. (currently amended) The method of claim 45, 48, or 51, 46 or 49, wherein the polypeptide is selected from the group consisting of a monoclonal antibody, antibody fragment, single chain fv, EphB1-Fc, EphB2-Fc, EphB3-Fc, EphB4-Fc, EphB1-Fc, EphB2-Fc, EphB3-Fc, and an EphB4 receptor fragment polypeptide containing an ephrin-B2 binding domain.

54. (currently amended) The method of claim 45, 48, or 51, 46 or 49, wherein the polypeptide is a synthetic polypeptide.

55. (currently amended) The method of claim 45, 48, or 51, 46 or 49, wherein the composition is administered to a mammal with a carrier suitable for parenteral administration.

56. (currently amended) The method of claim 44, 47, 50, 46 or 49, wherein the nucleic acid is an mRNA or a synthetic oligonucleotide.

57-58. (canceled)

59. (currently amended) A kit for causing tumor cell death by targeting tumor vasculature in a mammal comprising a composition which comprises a molecule that detects ephrin-B2 coupled to an agent that causes tumor cell death, wherein the agent that causes tumor cell death is carboplatin, cisplatin, vincristine, methotrexate, paclitaxel, docetaxel, 5-fluorouracil, UFT, hydroxyurea, gemcitabine, vinorelbine, irinotecan, tirapazamine, or matrilysin, and the molecule that detects ephrin-B2 is a nucleic acid or a polypeptide.

60 -61. (canceled)

62. (currently amended) A kit for causing tumor vascular endothelial cell death by targeting tumor vasculature in a mammal comprising a composition which comprises a molecule that detects ephrin-B2 coupled to an agent that causes vascular endothelial cell death, wherein the agent that causes vascular endothelial cell death is gelonin, ricin A, ricin B, saporin, bryodin 1, bryodin 2, momordin, pokeweed antiviral protein from seeds (PAP-S), trichokirin, or abrin, and the molecule that detects ephrin-B2 is a nucleic acid or a polypeptide.

63-64. (canceled).